REMARKS/ARGUMENTS

Corrections to the specification

Underlining has been removed from section headings and other headings in the specification, as required by the Examiner.

Claim Rejections under 35 U.S.C. 112

Claims 6, 19, and 32 have been amended to replace the limitation "the file corresponding to the file" with "the requested file corresponding to the filename." This amendment, in combination with the amendments to claim 1, 14, 27 provides proper antecedent basis. Applicants, request the Examiner to interpret claims 6, 19, 32 as amended, and not according to the interpretation provided by the Examiner in the Office Action (Page 3: Item 4).

Antecedent basis errors have been corrected for claims 7, 20, and 31.

Applicants submit that the amendment to claims 6, 7, 8, 19, 20, 21, 32, 33, 34 overcomes the Examiner's rejections under 35 U.S.C. 112 of claims 6-8, 19-21, 32-34.

Claim Rejections under 35 U.S.C. 102

The Examiner rejected claims 1, 10-14, 23-27, 36-39 under 35 U.S.C. 102(e) as being anticipated by Xu (US 6,324,581). Applicants traversethe claim rejections.

Amended Independent claims 1, 14, and 27

Amended independent claims 1, 14, 27 are for controlling and providing access to a file to a remote computer over a network, and require:

maintaining metadata about files maintained at remote storage locations;

receiving a request, at a server, from the remote computer over the network, wherein the request includes a filename corresponding to a requested file;

determining from the metadata, by the server, one remote storage location address associated with the filename where the requested file is located;

updating, by the server, the metadata for the requested file; and

sending, by the server, the one remote storage location address to the remote computer, wherein the one remote storage location address where the requested file is located is more proximate to the remote computer than to the server.

The new requirement that the receiving, determining, updating, and sending are performed by a server, are provided at least in blocks 525, 530, 545, 550, 555 of FIG. 1, and in FIGs. 5 and 6 of the Application. The new requirement that the request from the remote computer includes a filename corresponding to a requested file is provided in at least FIG. 4a and the associated description. The requirement that the one remote storage location address where the requested file is located is more proximate to the remote computer than to the server is provided in at least paragraph 19 of the Application.

The Examiner rejected the claims 1, 14, 27 as being anticipated by Xu (col. 3, lines 61-66, col. 9: lines 59-63; col. 10: lines 12-25). Applicants traverse.

The cited Xu discusses sending a request for metadata (Xu: col. 10, lines 12-14) from a client to a data mover of the file server. The data mover of the file server returns the metadata to client. The client uses the metadata to formulate a read or write request to a file system, where the file server includes the file system (Xu: col. 9, lines 60-62) in a cached disk array. The client may write new file attributes to the data mover.

The claims require that the one remote storage location address where the requested file is located be more proximate to the remote computer than to the server. The cited Xu discusses that the file is located in the file system (Xu: FIG. 3, reference numeral 62) where the file server includes the file system (Xu: col. 9, lines 60-62) in a cached disk array. Therefore, in the cited Xu the file is located in the server. Since the file is located in the server, in the cited Xu the file is more proximate to the server than to the remote computer and the cited Xu teaches away from

the claim requirement of the one remote storage location address where the requested file is located being more proximate to the remote computer than to the server.

Additionally, the claims require the server to receive a request from a remote computer, wherein the request includes a filename corresponding to a requested file. The cited Xu does discuss that the server receives a request. However, the cited Xu discusses that the request from the client to the server is for a metadata (Xu: col. 3: lines 12-14) whereas the claims require that the request from the remote computer includes a filename corresponding to a requested file. Nowhere does the cited Xu teach or disclose the claim requirement that the request from the remote computer to the server includes a filename corresponding to the requested file.

Additionally, the claims require the server to update the metadata for the requested file. The cited Xu discusses that the client may write new file attributes to the data mover of the server (Xu: col. 10: lines 20-22). Nowhere does the cited Xu teach or disclose the claim requirement of the server updating the metadata for the requested file.

For the above reasons, claims 1, 14, and 27 are patentable over the cited art.

Amended Independent Claims 10, 23, 36

Independent claims 10, 23, 36 are for accessing a file in a source code management system, and comprises:

sending, from a client, a first request for a the file to a server;

receiving, at the client, a storage location address containing the file in response to the first request, wherein the storage location address containing the file is located is more proximate to the client than to the server;

sending, from the client, a second request to the storage location address; and

receiving, at the client, an access to the file from the storage location address.

Applicants have added the requirements that the sending of the first and second request and the receiving of the storage location address and the access to the file from the storage location address are performed by the client. These added requirements are to be found in at least

block 515, 520, 560, 565, 580, 595 of FIG. 3 and the associated description in the Application. Applicants have also added the requirement that the one remote storage location address containing the file is located is more proximate to the client than to the server. The requirement that the one remote storage location address where the requested file is located is more proximate to the client than to the server is provided in at least paragraph 19 of the Application. Applicants have also corrected grammatical errors in claims 10, 23, 36.

The Examiner has rejected claims 10, 23, 36 as being anticipated by Xu (col. 3, lines 61-65, col. 10: lines 12-22). Applicants traverse.

The cited Xu discusses sending a request for metadata (Xu: col. 10, lines 12-14) from a client to a data mover of the file server. The data mover of the file server returns the metadata to client. The client uses the metadata to formulate a read or write request to a file system, where the file server includes the file system (Xu: col. 9, lines 60-62) in a cached disk array. The client may write new file attributes to the data mover.

The claims require that the storage location address containing the file is located more proximate to the client than to the server. The cited Xu discusses that the file is located in the file system (Xu: FIG. 3, reference numeral 62) where the file server includes the file system (Xu: col. 9, lines 60-62) in a cached disk array. Therefore, in the cited Xu the file is located in the server. Since the file is located in the server, in the cited Xu the file is more proximate to the server than to the client and the cited Xu teaches away from the claim requirement of the remote storage location address containing the file being more proximate to the client than to the server. Nowhere does the cited Xu teach or disclose the claim requirement of the remote storage location address containing the file being more proximate to the client than to the server.

For the above reasons claims 10, 23, and 36 are patentable over the cited art.

Dependent claims 2-9, 11-13, 15-22, 24-26, 28-35, 37-39

The Examiner has also rejected pending claims 2-9, 11-13, 15-22, 24-26, 28-35, 37-39 that depend on the pending independent claims 1, 14, 27, 10, 23, or 36. Applicants traverse these

rejections. Applicants submit that these claims are patentable over the cited art because they depend from claims 1, 14, 27, 10, 23, or 36 which are patentable over the cited art for the reason discussed above, and because the combination of the limitations in the dependent claims 2-9, 11-13, 15-22, 24-26, 28-35, 37-39 and the base and intervening claims from which they depend provide further grounds of distinction over the cited art.

Claim Rejections under 35 U.S.C. 103

The Examiner has rejected claims 3-5, 16-18, and 29-31 under 35 U.S.C. 103(a) as being unpatentable over Xu in view of Enoki (US 5,873,085). Applicants traverse.

Amended Claims 3, 16, 29

The amended claims 3, 16, 29 depend on dependent claims 2, 15, 28 respectively, whereas the original claims 3, 16, 29 depended from claims 1, 14, 27 respectively. Therefore, claims 3, 16, 39 include the following requirements in addition to the requirements of claims 1, 14, 27: (a) the remote computer is a source code management system client (b) the one remote storage location address identifies a storage device that is at a geographical location closer to the remote computer than a location of the metadata and (c) the server that received the request from the remote computer directly communicates the one storage location address for retrieval of the requested file to the network for transmission to the remote computer, based on the received request.

The new requirement of the server that received the request from the remote computer directly communicating the one storage location address for retrieval of the requested file to the network for transmission to the remote computer, based on the received request. may be found in block 555 of FIG. 3, block 750 of FIG. 5 blocks 845 and 850 of FIG. 6 the network 120 of FIG. 1, and the associated description of the Application.

The cited Enoki (fig. 1, reference number 109c, col. 13: lines 59 - col. 14, lines 32) discusses first modifying a file access request and then sending the modified file access request

from a first server computer 101a to a second server computer 102b, and then sending the response from the second serve computer 102b to the client. Therefore, in the cited Enoki the file access request of the client that is received at a server is modified and sent to another server for sending the response to the client, whereas the claims require that the server that received the request from the remote computer directly communicates the one storage location address for retrieval of the requested file to the network for transmission to the remote computer, based on the received request. Therefore, neither the cited Enoki nor the cited Xu teach or suggest the claim requirements either alone or in combination.

In addition, according to the Manual of Patent Examining Procedure (MPEP) §2143.01 "fact that references can be combined or modified is not sufficient to establish prima facie obviousness" and "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." Nowhere does the cited Enoki, the cited Xu or the cited Whidby (US patent publication No. 2003/0110264 A1 cited in the rejection of claim 2, 15, 28 on which claims 3, 16, 29 depend) that discusses source code management system, teach or suggest either the claimed combination or the desirability of combining or modifying their teachings to arrive at the claimed combination, where the claimed combination requires the following: (a) the remote computer is a source code management system client (b) the one remote storage location address identifies a storage device that is at a geographical location closer to the remote computer than a location of the metadata and (c) the server that received the request from the remote computer directly communicates the one storage location address for retrieval of the requested file to the network for transmission to the remote computer, based on the received request.

Additionally, using the cited Enoki to modify the source code management system of the cited Whidby (used for the rejection of claim 2, 15, 28 on which claims 3, 16, 29 depend) to arrive at the claim requirements of claims 3, 16, 29 would render the system of the cited Whidby inoperable because the source code would be distributed across multiple servers in the cited

Whidby and version control would not be possible according to the methods discussed in the cited Whidby.

For the above reasons, claims 3, 16, 29 are patentable over the cited art.

Claims 4-5, 17-18, 30-31

Applicants submit that these claims are patentable over the cited art because they depend from claims 3, 16, 29 which are patentable over the cited art for the reason discussed above, and because the combination of the limitations in the dependent claims 4-5, 17-18, 30-31 and the base and intervening claims from which they depend provide further grounds of distinction over the cited art.

Claims 6-8, 19-21, 32-34

The Examiner rejected claims 6-8, 19-21, and 32-34 under 35 U.S.C. 103(a) as being unpatenble over Xu in view of Porcar ("File Migration in Distributed Systems" California Univ., Berkeley, Lawrence, Berkeley Lab, copyright 1982).

Amended Claims 6, 19, 32

Claims 6, 19, 32 depend on claims 1, 14, 27 respectively and further require:

The method of claim 1, further comprising:

processing a pattern of requests for the requested file received from remote computers at different geographical locations;

determining a plurality of remote storage locations based on the pattern of requests for the requested file;

storing the requested file corresponding to the filename at the determined plurality of remote storage locations; and

saving a correspondence between the requested file and storage location addresses corresponding to the determined plurality of remote storage locations in the metadata.

The new requirement of determining a plurality of remote storage locations based on the pattern of requests for the requested file, storing the requested file corresponding to the ~~file~~ filename at the determined plurality of remote storage locations, and saving a correspondence between the requested file and storage location addresses corresponding to the determined plurality of remote storage locations in the metadata is provided in at least page 12, lines 23-26 of the Application.

The cited Porcar discusses "only ... policies that maintain a single copy of each file in the system" [Lines 2-3 of the summary of the cited Porcar]. The claims require storing the requested file corresponding to the file at the plurality of determined remote storage locations and nowhere does the cited Porcar teach or suggest this claim requirement. In contrast, the cited Porcar explicitly mentions that the cited Porcar only considers policies that maintain a single copy of each file in the system. The claims require storing the requested file at a plurality of remote storage locations, and therefore the cited Porcar which explicitly restricts each file to a single copy for storage is different from these claim requirements. Additionally, nowhere does the cited Xu teach or suggest the claim requirements of storing the requested file corresponding to the filename at the determined plurality of remote storage locations, where determining the plurality of remote storage locations is based on the pattern of requests for the requested file.

For the above reasons, claims 6, 19, and 32 are patentable over the cited art.

Claims 7-8, 20-21, and 33-34

Applicants submit that these claims are patentable over the cited art because they depend from claims 6, 19, 32 which are patentable over the cited art for the reason discussed above, and because the combination of the limitations in the dependent claims 7-8, 20-21, and 33-34 and the base and intervening claims from which they depend provide further grounds of distinction over the cited art.

New claims 40-45

The requirements of new claims 40-45 may be found in at least original claims 2, 3, block 555 of FIG. 3, block 750 of FIG. 5 blocks 845 and 850 of FIG. 6, the network 120 of FIG. 1, page 12, lines 23-26, FIGs. 1- 10, and the associated description of the Application. Nowhere does the cited art teach and disclose, or teach and suggest, the requirements of the new claims 40-45.

Conclusion

For all the above reasons, Applicant submits that the pending claims are patentable over the art of record. Applicants have indicated appropriate fees. Nonetheless, should any additional fees be required, please charge Deposit Account No. 09-0449.

The attorney/agent invites the Examiner to contact him at (310) 557-2292 if the Examiner believes such contact would advance the prosecution of the case.

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By: Rabindranath Dutta

Rabindranath Dutta
Registration No. 51,010

Please direct all correspondences to:

Rabindranath Dutta
Konrad Raynes & Victor, LLP
315 South Beverly Drive, Ste. 210
Beverly Hills, CA 90212
Tel: 310-557-2292
Fax: 310-556-7984